REMARKS

I. Introduction

By the present Amendment, claims 2 and 4-8 have been amended, and claims 1 and 3 canceled. Claim 9 is newly presented for consideration. Accordingly, claims 2 and 4-9 are now pending in the application. Claims 4-8 are independent.

II. Office Action Summary

In the Office Action of July 22, 2005, the title of the invention was objected to. Claims 1-8 were rejected under 35 USC §103(a) as being unpatentable over Japanese Patent Publication JP 2001-256004A to Igari in view of U.S. Patent No. 6,636,689 issued to Stebbings.

The Examiner's indication that claims 5-8 would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims, is noted with appreciation.

III. Objections to the Specification

The title of the invention was objected to as being non-descriptive. The Office Action requested provision of a title clearly indicative of the invention to which the claims are directed.

By the present Amendment, Applicants have changed the title to recite:

SYSTEM FOR CONTROLLING HOST ACCESS TO A STORAGE DEVICE BASED ON PHYSICAL CHARACTERISTICS OF THE STORAGE DEVICE

Applicants respectfully submit that the present title clearly indicates the invention to which the claims are directed. Accordingly, this objection should be withdrawn.

IV. Rejections Under 35 USC §103

Claims 1-8 were rejected under 35 USC §103(a) as being unpatentable over Igari in view of Stebbings. With respect to claim 1, the Office Action indicates that Igari teaches an information recording/reproducing system that comprises a magnetic disk apparatus and a host system to which the magnetic disk apparatus can be removably connected. The host system is also capable of accessing the magnetic disk apparatus for recording/reproducing information. It is alleged that the magnetic disk apparatus includes authentication key generating means for generating an authentication key. The Office Action admits that Igari fails to teach the authentication key being generated on the basis of physical characteristics of the magnetic disk apparatus itself. Stebbings is relied upon for teaching a system that utilizes an authentication key generated on the basis of physical characteristics of the magnetic disk apparatus itself. According to the Office Action, Stebbings discloses that "another disk having the same modulation characteristics is required in order for it to be considered an authenticated disk." Reference is directed to column 13, lines 6-12 of Stebbings.

At the outset, Applicants note that the Office Action has indicated claims 5-8 to be allowable.

By the present Amendment, claim 4 has been amended to incorporate the subject matter previously recited in independent claim 1. As amended,

independent claim 4 defines an information recording/reproducing system that comprises:

> a magnetic disk apparatus for recording/ reproducing information and a host system to which said magnetic disk apparatus can be removably connected, said host system being capable of accessing said magnetic disk apparatus for recording/reproduction of the information,
> wherein said magnetic disk apparatus includes:
> a magnetic disk, and
> authentication key generating means for generating an authentication key on the basis of physical characteristic of said magnetic disk apparatus itself, and
> wherein said authentication key is generated on the basis of an eccentricity characteristic of said magnetic disk.

The Office Action alleges that Igari teaches that the authentication key is generated on the basis of eccentricity characteristics of the magnetic disk. Reference is directed to paragraph [0028] of Igari. This assertion appears to be predicated on the Examiner's definition of the term eccentric, which is defined in the Office Action as "departing from a recognized or differing from the normal." See page 4, 1st full paragraph of Office Action.

This definition appears to be an a standard English/non-technical definition which is clearly not applicable to the technical field of magnetic disks and devices related to magnetic disks. Specifically, eccentricity is a mathematical property of a conic section which can be defined, for example, in terms of a semi-major axis and a semi-minor axis. The eccentricity can also be defined as the fraction of the distance along the semi-major axis at which the focus of the conic section lies. Thus, the term "eccentricity", which is clearly a technical term, is not intended to be interpreted on the basis of a standard English and/or college dictionary.

According to independent claim 4, the information recording/reproducing system includes a magnetic disk apparatus for recording/reproducing information and a host system to which the magnetic disk apparatus can be removably connected. The host system is also capable of accessing the magnetic disk apparatus in order to record and/or reproduce information. Additionally, the magnetic disk apparatus includes a magnetic disk and an authentication key generating means that generates an authentication key based on physical characteristics of the magnetic disk apparatus itself. In particular, the authentication key is generated based on an eccentricity characteristic of the magnetic disk.

The Office Action alleges that Stebbings discloses the feature of generating an authentication key based on physical characteristics of the magnetic disk. However, the manner in which Stebbings generates the authentication key differs from that recited in independent claim 4. Specifically, Stebbings discloses a system wherein the authentication key can be generated based on a modulation technique applied to certain characteristics of the disk. There appear to be three modulation techniques used in the system. Stebbings can apply a pit width modulation which is based on variations in the width of pits on the normal layers of the disk. A second method is the pit depth modulation which varies the depth of the pits on the surface of the disk in a predetermined manner which is within normal manufacturing tolerances. Further, the continuous spiral/tracks of the disk can be modulated in a manner referred to as pit track modulation. See column 18, lines 4-12. These techniques, however, never take into account any of the eccentricity characteristics of the disk itself. Rather, they are concerned only with characteristics of the pits on the surface of

the disk. Stebbings simply fails to either disclose or suggest a system wherein an "authentication key is generated on the basis of an eccentricity characteristic of said magnetic disk."

It is therefore respectfully submitted that independent claim 4 is allowable over the art of record.

Claim 2 depends from independent claim 4, and is therefore believed allowable for at least the reasons set forth above with respect to independent claim 4. In addition, this claim introduces novel elements that independently render it patentable over the art of record.

Claim 9 is newly presented and also depends from independent claim 4. Accordingly, claim 9 is believed allowable over the art of record. Furthermore, claim 9 specifies that the eccentricity characteristic results from an error between the center of rotation of the spindle motor and the center of rotation of the magnetic disk. Such a feature is not show or suggested by the art of record.

Claims 5-8 have been rewritten in independent form as suggested in the Office Action. Accordingly, these claims are believed allowable as they were previously indicated by the Examiner.

V. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 500.42806X00).

Respectfully submitted,
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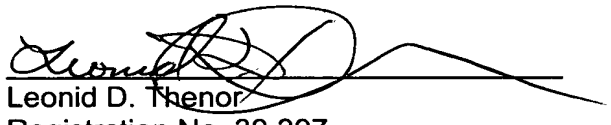

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